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Transmitted via Email

February 15, 2018

Cathy Giessel, Chair, and Members of the Senate Resources Committee
Alaska Senate Resources Committee
State Capitol Room 427
Juneau, Alaska 99801

Re: Senate Bill 173

Dear Madam Chair and Members of the Committee:

Thank you for your consideration of these comments on SB 173 prepared by Alaska Community Action on Toxics. Alaska Community Action on Toxics is a statewide non-profit public interest environmental health research and advocacy organization dedicated to protecting environmental and public health.

We understand that the Senate Resources Committee may take action on an amended version of SB 173 on February 16. SB 173 would eliminate the assumption of liability and remediation costs for utilities and other potentially responsible parties associated with contamination from utility poles treated with pentachlorophenol (PCP), a highly hazardous pesticide. We ask that the Committee delay action on this bill in order to allow time for the careful consideration of the implications and possible solutions to the problem of contamination resulting from the use and disposal of the estimated 250,000 of treated utility poles distributed throughout the State of Alaska. A considerable number of these poles are located in proximity to schools, homes, drinking water sources, and in sensitive wetland habitats. There have been no studies to investigate contamination and possible exposures from treated utility poles in Alaska, with one exception, a study conducted by the U.S. Fish and Wildlife Service in the Kenai National Wildlife Refuge.

As far as we know, the only study of contamination from treated utility poles in Alaska was conducted within the Kenai National Wildlife Refuge. In a letter to the Alaska Department of Environmental Conservation (January 22, 2016), the Refuge Manager stated: "Results reveal that the majority of poles treated with PCP, both historically (1950s) and more recently (within the last 20 years) have contaminated surrounding soils with concerning levels of PCP and dioxins/furans." Evidence that contamination associated with poles from the 1950s is indicative of the persistence of this toxic pesticide. The Alaska Department of Environmental Conservation

sent a letter to the Homer Electric Association (May 6, 2016) in reference to the US Fish and Wildlife Service findings, stating: “The laboratory results document concentrations of PCP, dioxins and furans significantly above the state soil cleanup levels.”

In a study published in the American Journal of Public Health,¹ researchers in Vermont found that treated utility poles contaminated a drinking water source with PCP levels up to 2,000 times the EPA maximum contaminant level. The authors noted that treated utility pole placement in the vicinity of water sources increases the likelihood of drinking water contamination. They recommended the implementation of placement guidelines, best management practices, policies and procedures to restrict installation of treated utility poles near drinking water sources, and the use of safer alternatives.

Pentachlorophenol, a persistent and bioaccumulative toxic pesticide, is associated with adverse health effects including damage to the developing brain and nervous system, impairment of memory and learning, disruption to thyroid function, immune suppression, infertility, and increased risk of certain cancers such as non-Hodgkin lymphoma. In September 2014, the U.S. National Toxicology Program re-classified PCP “as reasonably anticipated to be a human carcinogen.”² Regulatory controls and restrictions of this unmanageable substance have proven inadequate in protecting children from harmful exposures. In a scientific paper published in the medical journal Lancet, PCP is included among the industrial chemicals known to cause brain toxicity and neurological symptoms in humans, noting that the substance affects the brain and exerts toxicity to brain cells.³ In 2015, pentachlorophenol was banned under the legally binding provisions of the international Stockholm Convention on Persistent Organic Pollutants (POPs treaty) because of its persistence, toxicity, bioaccumulation, and long-range transport. The expert committee of scientists to the Stockholm Convention stated that global action is warranted on pentachlorophenol because of its long-range environmental transport, as well as its significant adverse human health and environmental effects.

Emissions from PCP-treated wooden poles are one of the main sources of dioxins and furans, which contaminate soils and groundwater beneath PCP-treated utility poles. Dioxins and furans are among the most toxic and persistent synthetic chemicals, and produced as by-products in the manufacturing of PCP and treatment of utility poles. PCP treated poles and wood are important sources and significant reservoir of dioxins and furans that present a hazard for environmental and human exposure due to documented contamination of groundwater, soils, and foods. Bulle et al. 2010⁴ concluded that emissions from PCP-treated wooden poles in service are one of the main sources of dioxins and furans. Lorber et al. 2002⁵ concluded that the size of the dioxin reservoir in PCP-treated utility poles and that even low release rates from these poles have

¹ Karlsson L, Cragin L, Center G, Giguere C, Comstock J, Bocuzzo L, Sumner A (2013) Pentachlorophenol contamination of private drinking water from treated utility poles, Am J Public Health 103:276-277.

² National Toxicology Report on Carcinogens (2014). Pentachlorophenol and by-products of its synthesis.

<https://ntp.niehs.nih.gov/ntp/roc/content/profiles/pentachlorophenol.pdf>

³ Grandjean, P and P Landrigan (2006). Developmental neurotoxicity of industrial chemicals. Lancet 368: 2167-78.

⁴ Bulle, C. et al. 2010. Enhanced migration of PCDD/Fs in the presence of PCP-treated oil in soil around utility poles: screening model validation. Env. Tox. Chem 29(3):582-590.

⁵ Lorber, MN et al. 2002. Investigation of the potential release of polychlorinated dioxins and furans from PCP-treated utility poles. Sci. Total Env. 290:15-39.

potential for significant environmental releases. This study underscores the importance of utility poles as sources for dioxins.

We recommend that the Committee delay action on this bill to allow for thorough discussion of possible amendments that are focused on solutions to the problem of pentachlorophenol (and dioxin/furan) contamination associated with utility poles in Alaska. These could include the convening of a public task force to address the issue and/or a requirement for the development and implementation of best management practices (BMP) – as has been done in Vermont – to mitigate contamination and to pursue the substitution of safer, cost effective alternatives. We are encouraged about the viability and availability of cost effective alternatives to the use of PCP-treated wood, particularly non-chemical material substitutions for utility poles. Industry has evolved and innovated over the past several years toward using alternative materials such as fiberglass composite, recycled steel, concrete, and undergrounding of wire that are comparable or superior to PCP-treated wood in terms of strength, cost, and longevity. These do not have to be disposed or treated as hazardous waste, so there are clear cost and environmental benefits of using these safer materials.

Thank you for your consideration of our comments.

Sincerely,



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